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     FILE 'REGISTRY' ENTERED AT 10:12:21 ON 17 FEB 2009
L1              STRUCTURE UPLOADED
L2           50 S L1
L3         1566 S L1 SSS FULL

     FILE 'HCAPLUS' ENTERED AT 10:13:09 ON 17 FEB 2009
L4         8764 S L3
L5         3373 S PHOSPHORAMIDITE
L6            6 S L4 AND L5
L7         9664 S (SOLID SUPPORT)
L8            6 S L4 AND L7
L9           11 S L6 OR L8
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=> file registry
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                   0.22       0.22

FILE 'REGISTRY' ENTERED AT 10:12:21 ON 17 FEB 2009
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provided by InfoChem.

STRUCTURE FILE UPDATES:   16 FEB 2009  HIGHEST RN 1107125-97-2
DICTIONARY FILE UPDATES:  16 FEB 2009  HIGHEST RN 1107125-97-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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Uploading C:\Program Files\STNEXP\Queries\10539625activator.str
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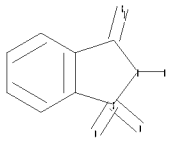

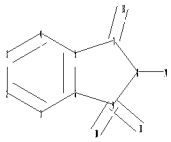

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10 11 13 14
ring nodes :
1 2 3 4 5 6 7 8 9
chain bonds :
7-13 8-14 9-10 9-11
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9
exact/norm bonds :
5-7 6-9 7-8 7-13 8-9 9-10 9-11
exact bonds :
8-14
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

G1:O,S

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS
11:CLASS 13:CLASS 14:CLASS

L1   STRUCTURE UPLOADED

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SAMPLE SEARCH INITIATED 10:12:38 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -   1030 TO ITERATE

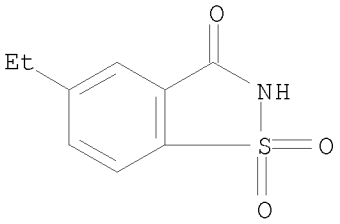
100.0% PROCESSED   1030 ITERATIONS   50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS: 18675 TO   22525
PROJECTED ANSWERS: 964 TO   1996

L2   50 SEA SSS SAM L1

=> d l2 scan

L2   50 ANSWERS   REGISTRY COPYRIGHT 2009 ACS on STN
IN   1,2-Benzisothiazol-3(2H)-one, 5-ethyl-, 1,1-dioxide
MF   C9 H9 N O3 S

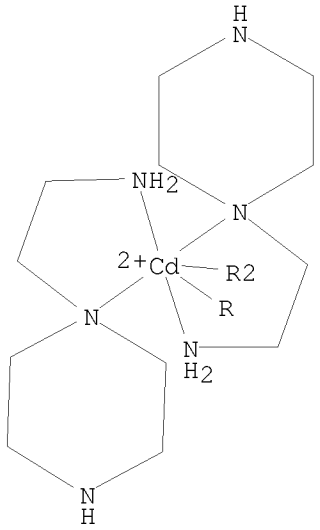


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

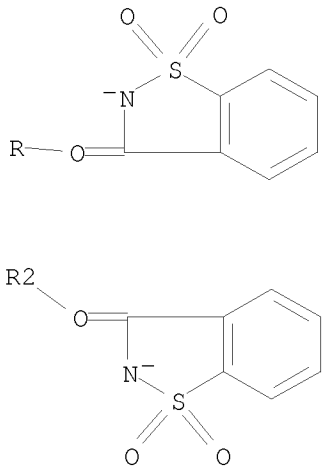
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):4

L2   50 ANSWERS   REGISTRY COPYRIGHT 2009 ACS on STN
IN   Cadmium, bis[(3H-1,2-benzisothiazol-3-one-κO3)
     1,1-dioxidato]bis(1-piperazineethanamine-κNN1,κN1)-,
     (OC-6-12)- (9CI)
MF   C26 H38 Cd N8 O6 S2
CI   CCS

PAGE 1-A



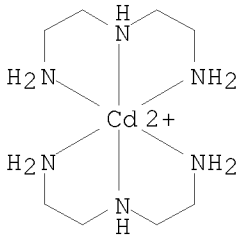
PAGE 2-A



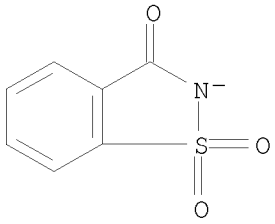
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 50 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN Cadmium(2+), bis[N-[2-(amino-κN)ethyl]-1,2-ethanediamine-κN,κN']-, (OC-6-2'2)-, salt with 1,2-benzisothiazol-3(2H)-one 1,1-dioxide (1:2) (9CI)
MF C8 H26 Cd N6 . 2 C7 H4 N O3 S

CM 1



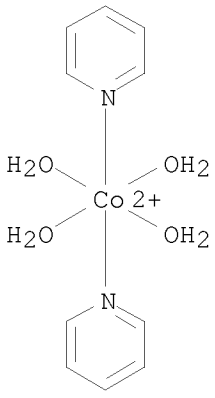
CM 2



L2 50 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN Cobalt(2+), tetraaquabis(pyridine)-, (OC-6-11)-, salt with 1,2-benzisothiazol-3(2H)-one 1,1-dioxide (1:2), tetrahydrate (9CI)
MF C10 H18 Co N2 O4 . 2 C7 H4 N O3 S . 4 H2 O

CM 1

CM 2



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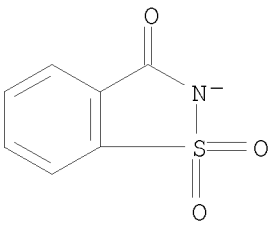
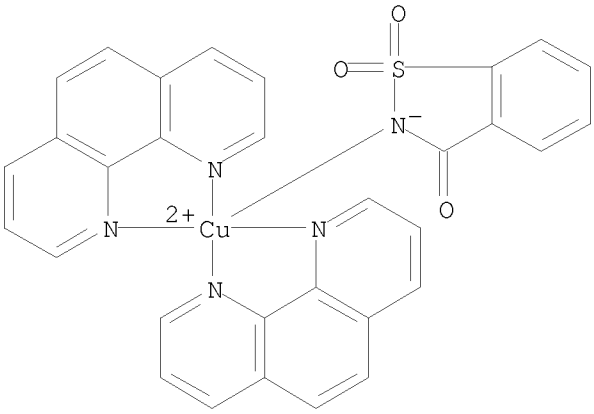


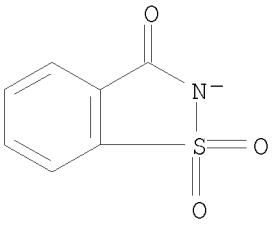
L2 50 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
IN Copper(1+), (1,2-benzisothiazol-3(2H)-one 1,1-dioxidato-N2)bis(1,10-phenanthroline-N1,N10)-, (TB-5-22)-, salt with 1,2-benzisothiazol-3(2H)-one 1,1-dioxide (1:1), dihydrate (9CI)
MF C31 H20 Cu N5 O3 S . C7 H4 N O3 S . 2 H2 O

CM 1

CM 2



CM 3



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

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FULL SCREEN SEARCH COMPLETED - 19788 TO ITERATE

100.0% PROCESSED 19788 ITERATIONS 1566 ANSWERS
SEARCH TIME: 00.00.01

L3 1566 SEA SSS FUL L1

=> file hcaplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 185.88 186.10

FILE 'HCAPLUS' ENTERED AT 10:13:09 ON 17 FEB 2009
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FILE COVERS 1907 - 17 Feb 2009 VOL 150 ISS 8
FILE LAST UPDATED: 16 Feb 2009 (20090216/ED)

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s l3
L4 8764 L3

=> s phosphoramidite
L5 3373 PHOSPHORAMIDITE

=> s l4 and l5
L6 6 L4 AND L5

=> s (solid support)
1182316 SOLID
553839 SUPPORT
L7 9664 (SOLID SUPPORT)
(SOLID(W)SUPPORT)

=> s l4 and l7
L8 6 L4 AND L7

=> s l6 or l8
L9 11 L6 OR L8

=> d l9 1-11 ti abs bib

L9 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
TI The mechanism of the phosphoramidite synthesis of polynucleotides
AB The mechanism of the coupling step in polynucleotide synthesis using 5'-4,4'-dimethoxytritylthymidine-3'-β-cyanoethyl-N,N-diisopropylphosphoramidite as the phosphitylating agent and catalyzed by the salt of saccharin and N-methylimidazole in acetonitrile has been studied by 31P NMR. Pre- and post-equilibrium between the activator salt and released diisopropylamine have been examined by 1H NMR and ITC, which show that the salt between saccharin and diisopropylamine will be present in acetonitrile. Activation of the phosphoramidite by the salt of saccharin and N-methylimidazole involves nucleophilic catalysis and the formation of a reactive saccharin adduct bonded through its carbonyl oxygen to phosphorus. The rate consts. for the reaction of the 4-methoxyphenol with 5'-4,4'-dimethoxytritylthymidine-3'-β-cyanoethyl-N,N-diisopropylphosphoramidite in the presence of saccharin-N-methylimidazole salt show a non-linear dependence on phenol concentration, becoming independent at high phenol concns., compatible with a change in rate limiting step from the alcoholysis step to the activation step.
AN 2008:1137938 HCAPLUS <<LOGINID::20090217>>
DN 149:534500
TI The mechanism of the phosphoramidite synthesis of polynucleotides
AU Russell, Mark A.; Laws, Andrew P.; Atherton, John H.; Page, Michael I.
CS Department of Chemical and Biological Sciences, University of Huddersfield, Huddersfield, Queensgate, HD1 3DH, UK
SO Organic & Biomolecular Chemistry (2008), 6(18), 3270-3275
CODEN: OBCRAK; ISSN: 1477-0520
PB Royal Society of Chemistry
DT Journal
LA English
RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Highly Effective Non-Explosive Activators Based on Saccharin for the Synthesis of Oligonucleotides and Phosphoramidites
AB A new class of non-explosive activators has been developed based on heterocyclic tertiary amine salts of saccharin. These salts have been found to be highly effective in the synthesis of oligonucleotides and nucleoside phosphoramidites.
AN 2007:1392849 HCAPLUS <<LOGINID::20090217>>
DN 149:493885
TI Highly Effective Non-Explosive Activators Based on Saccharin for the Synthesis of Oligonucleotides and Phosphoramidites
AU Sinha, Nanda D.; Foster, Patrick; Kuchimanchi, Satya N.; Miranda, Greg; Shaikh, Saied; Michaud, Dennis
CS Avecia Biotechnology, Inc., Milford, MA, USA
SO Nucleosides, Nucleotides & Nucleic Acids (2007), 26(10-12), 1615-1618
CODEN: NNNAFY; ISSN: 1525-7770
PB Taylor & Francis, Inc.
DT Journal
LA English
RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN

TI Fluorimetric sequential injection analysis optosensing in pharmaceutical analysis: Determination of paracetamol

AB The coupling of sequential injection anal. (SIA) and fluorimetric solid phase transduction is here applied to the determination of paracetamol in pharmaceuticals. The reaction product between the analyte and sodium nitrite in acidic medium is inserted, after alkalinization, in the system. This product is transitorily retained on the active solid sensing phase (the anionic solid support QAE A-25) developing its native fluorescence signal, which is measured at 325/430 nm for the excitation and emission wavelengths resp. The described system is linear within the range 6.6-80 μg ml-1, with a 2 μg ml-1 detection limit and a 2.5% R.S.D (n = 10). The proposed fluorimetric SIA optosensor has been applied to the determination of paracetamol in several pharmaceutical prepns., obtaining satisfactory results.

AN 2007:1137820 HCAPLUS <<LOGINID::20090217>>

DN 147:528510

TI Fluorimetric sequential injection analysis optosensing in pharmaceutical analysis: Determination of paracetamol

AU Llorent-Martinez, E. J.; Satinsky, D.; Solich, P.; Ortega-Barrales, P.; Molina-Diaz, A.

CS Department of Physical and Analytical Chemistry, Faculty of Experimental Sciences, University of Jaen, Jaen, Paraje Las Lagunillas, E-32071, Spain

SO Journal of Pharmaceutical and Biomedical Analysis (2007), 45(2), 318-321 CODEN: JPBADA; ISSN: 0731-7085

PB Elsevier B.V.

DT Journal

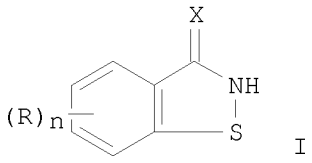
LA English

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN

TI Process for the solid phase preparation of oligodeoxyribonucleotides using heterocycle activators

GI



I

AB A process for the synthesis of an oligonucleotide is provided in which an oligonucleotide is assembled on a swellable solid support using the phosphoramidite approach in the presence of an activator I, wherein n is 0-4; R for each occurrence is a substituent, or two adjacent R groups taken together with the carbon atoms to which they are attached form a six membered saturated or unsatd. ring; and X is O or S; the activator is not tetrazole or a substituted tetrazole. Preferred activators are pyridinium, imidazolinium and benzimidazolinium salts; benzotriazole and derivs. thereof; and saccharin or a saccharin derivative Preferred swellable solid supports comprise functionalized polystyrene, partially hydrolyzed polyvinyl-acetate or poly(acrylamide).

AN 2004:534221 HCAPLUS <<LOGINID::20090217>>

DN 141:54582

TI Process for the solid phase preparation of oligodeoxyribonucleotides using heterocycle activators

IN Mccormac, Paul
PA Avecia Limited, UK
SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 4

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004055036	A1	20040701	WO 2003-GB5464	20031216
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
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WO 2003091267	A1	20031106	WO 2003-GB1795	20030425
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CA 2510477	A1	20040701	CA 2003-2510477	20031216
AU 2003292423	A1	20040709	AU 2003-292423	20031216
EP 1575975	A1	20050921	EP 2003-768001	20031216
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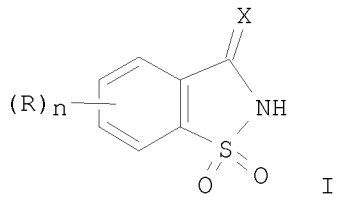
CN 1747963	A	20060315	CN 2003-80109693	20031216
CN 100384864	C	20080430		
JP 2006512411	T	20060413	JP 2005-502460	20031216
US 20060149052	A1	20060706	US 2006-539625	20060103
PRAI GB 2002-29443	A	20021218		
WO 2003-GB1795	A	20030425		
GB 2002-9539	A	20020426		
WO 2003-GB5464	W	20031216		

OS CASREACT 141:54582; MARPAT 141:54582
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Preparation and phosphitylation process of nucleosides in presence of imidazole sulfonamide activators
GI



I

AB A process for the phosphitylation of an alc. or thiol with a phosphitylation agent in the presence of sulfonamide activator I, wherein n is 0 or an integer from 1 to 4; R for each occurrence is a substituent; X is O or S; is provided. The activator is commonly employed as a salt complex with an organic base. Preferred alcs. or thiols include nucleosides and oligonucleotides. The process is particularly suited for the synthesis of phosphoramidites. Thus, 5'-DMT-N-Bz-2'-deoxyadenosine was prepared and submitted to phosphitylation with O-3-cyanoethyl-N,N,N',N'-tetraisopropylphosphorodiamidite in presence of N-methylimidazole salt of saccharin to give the corresponding nucleoside phosphoramidite in good yield.

AN 2004:354958 HCAPLUS <<LOGINID::20090217>>

DN 140:339578

TI Preparation and phosphitylation process of nucleosides in presence of imidazole sulfonamide activators

IN Sinha, Nanda Dulal

PA Avecia Biotechnology Inc., USA; Avecia Limited

SO PCT Int. Appl., 17 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004035599	A1	20040429	WO 2003-GB4312	20031008
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	CA 2501565	A1	20040429	CA 2003-2501565	20031008
	AU 2003269239	A1	20040504	AU 2003-269239	20031008
	EP 1554300	A1	20050720	EP 2003-751018	20031008
	EP 1554300	B1	20070523		
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	CN 1705675	A	20051207	CN 2003-80101403	20031008
	CN 1329408	C	20070801		
	JP 2006508081	T	20060309	JP 2004-544427	20031008
	AT 362937	T	20070615	AT 2003-751018	20031008
	IN 2005DN01348	A	20090109	IN 2005-DN1348	20050404
	US 20060069247	A1	20060330	US 2005-531323	20051011
	US 7247720	B2	20070724		
PRAI	US 2002-418185P	P	20021015		
	WO 2003-GB4312	W	20031008		

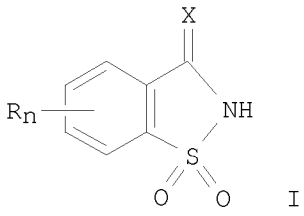
OS MARPAT 140:339578

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN

TI Preparation of oligodeoxyribonucleotides via condensation reaction using 1,1-dioxo-1,2-dihydro-1λ6-benzo[d]isothiazol-3-one salt activators

GI



I

AB A process for the synthesis of oligonucleotides using phosphoramidite chemical is provided. The process employs as activator a 1,1-dioxo-1,2-dihydro-1λ6-benzo[d]isothiazol-3-one, preferably in the presence of an organic base. The 1,1-dioxo-1,2-dihydro-1λ6-benzo[d]isothiazol-3-one is represented by the following structural formula I; wherein n is 0 or an integer from 1 to 4; X is O or S; R for each occurrence is a substituent, preferably each independently, a halo, a substituted or unsubstituted aliphatic group, -NR1R2, -OR3, -OC(O)R3, -C(O)OR3, or cyano; or two adjacent R groups taken together with the carbon atoms to which they are attached form a six membered saturated or unsatd. ring; R1 and R2 are each, independently, H, a substituted or unsubstituted aliphatic group, a substituted or unsubstituted aryl group, or a substituted or unsubstituted aralkyl group; and R3 is a substituted or unsubstituted aliphatic group, a substituted or unsubstituted aryl group, or a substituted or unsubstituted aralkyl group. Preferred organic bases are pyridine, 3-methylpyridine, or N-methylimidazole. Thus, 5'-TCTCCCAGCGTGCGCCAT-3' was prepared via condensation reaction using salt activator 1,1-dioxo-1,2-dihydro-1λ6-benzo[d]isothiazol-3-one and N-methylimidazole.

AN 2003:42287 HCAPLUS <<LOGINID::20090217>>
DN 138:90027

TI Preparation of oligodeoxyribonucleotides via condensation reaction using 1,1-dioxo-1,2-dihydro-1λ6-benzo[d]isothiazol-3-one salt activators

IN Sinha, Nanda; Zedalis, William Edward; Miranda, Gregory Keith
PA Avecia Biotechnology Inc., USA; Avecia Limited

SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DT Patent
LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003004512	A1	20030116	WO 2002-GB3029	20020701
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2452205	A1	20030116	CA 2002-2452205	20020701
	AU 2002319409	A1	20030121	AU 2002-319409	20020701
	EP 1404696	A1	20040407	EP 2002-748994	20020701
	EP 1404696	B1	20060208		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

JP	2004533488	T	20041104	JP 2003-510678	20020701
CN	1549820	A	20041124	CN 2002-817156	20020701
AT	317395	T	20060215	AT 2002-748994	20020701
ES	2258151	T3	20060816	ES 2002-748994	20020701
HU	2004000151	A2	20070828	HU 2004-151	20020701
IN	2003DN02244	A	20060120	IN 2003-DN2244	20031223
US	20060041114	A1	20060223	US 2004-482441	20040813
IN	2005DN02792	A	20061229	IN 2005-DN2792	20050623
PRAI US	2001-302717P	P	20010703		
WO	2002-GB3029	W	20020701		
GB	2002-29443	A	20021218		

OS MARPAT 138:90027
RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Flow-through UV spectrophotometric sensor for determination of (acetyl)salicylic acid in pharmaceutical preparations
AB The solid phase spectrophotometry technique, in which the absorbance of the species of interest sorbed on a solid support is measured directly, was applied to the determination of salicylic acid using flow injection-anal. Salicylic acid was determined by monitoring of its intrinsic absorbance at 297 nm sorbed on Sephadex QAE A-25 resin placed in an appropriate flow-through cell. The method proposed improves the selectivity compared with the corresponding solution-phase method and the sensitivity is increased by a factor of 30 or more. The flow-through sensor proposed allows working with several calibration lines simply by varying the sample volume injected. Thus, linear dynamic ranges from 1 to 20 and from 2 to 40 μg ml-1 can be obtained by using 1000 and 300 μl, resp., with detection limits being 0.064 and 0.135 μg ml-1. Relative Standard Deviations (RSDs) of 0.52 and 0.38%, and sampling frequencies of 18 and 25 h-1, resp., were also achieved. The sensor also allows the indirect determination of acetylsalicylic acid previous hydrolysis online to salicylic acid. For acetylsalicylic acid, a linear dynamic range from 5 to 120 μg ml-1 and 25 h-1 of sampling frequency (300 μl of sample volume) were obtained. The proposed flow-through sensor has been successfully applied to the determination of both analytes in pharmaceutical prepns.
AN 2001:218896 HCAPLUS <<LOGINID::20090217>>
DN 135:112083
TI Flow-through UV spectrophotometric sensor for determination of (acetyl)salicylic acid in pharmaceutical preparations
AU Ruiz-Medina, A.; Fernandez-de Cordova, M. L.; Ortega-Barrales, P.; Molina-Diaz, A.
CS Department of Physical and Analytical Chemistry, Faculty of Experimental Sciences, University of Jaen, Jaen, 23071, Spain
SO International Journal of Pharmaceutics (2001), 216(1-2), 95-104
CODEN: IJPHDE; ISSN: 0378-5173
PB Elsevier Science B.V.
DT Journal
LA English
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Synthesis and Properties of Aminoacylamido-AMP: Chemical Optimization for the Construction of an N-Acyl Phosphoramidate Linkage
AB This paper describes the design and synthesis of a new type of

aminoacyl-adenylate analog (aa-AMPN) having an N-acyl phosphoramidate linkage where the oxygen atom of the mixed anhydride bond of aminoacyl-adenylate (aa-AMP) is replaced by an amino group. This new type of aa-AMP analog is expected to be useful as material for studies on the recognition mechanism of the aminoacylation of tRNA and other biochem. reactions. The condensation of phosphoramidite derivs. of carboxamides with nucleoside derivs. failed, because the activated phosphoramidite derivs. reacted with not only the hydroxyl groups but also another reactive species. An alternative approach was examined by the reaction of 5'-O-phosphoramidite adenosine derivs. with carboxamide derivs. The TBTr and TSE groups were chosen for protection of the amino group of amino acid amides and the phosphate group, resp. Detailed studies revealed that the use of 5-(3,5-dinitrophenyl)-1H-tetrazole as an activating catalyst of phosphoramidites resulted in rapid condensation within 10 min to give fully protected aa-AMPN derivs. No side reaction occurred. Deprotection of these products via a two-step procedure gave aa-AMPN derivs. in good yields. It also turned out that aa-AMPNs thus obtained are stable under both acidic and basic conditions, such as 0.1 M HCl (pH 1.0) and 0.1 M NaOH (pH 13.0).

AN 2000:767110 HCAPLUS <<LOGINID::20090217>>

DN 134:71818

TI Synthesis and Properties of Aminoacylamido-AMP: Chemical Optimization for the Construction of an N-Acyl Phosphoramidate Linkage

AU Moriguchi, Tomohisa; Yanagi, Terukazu; Kunimori, Masao; Wada, Takeshi; Sekine, Mitsuo

CS Faculty of Life Science, Tokyo Institute of Technology, Midoriku Yokohama, 226-8501, Japan

SO Journal of Organic Chemistry (2000), 65(24), 8229-8238
CODEN: JOCEAH; ISSN: 0022-3263

PB American Chemical Society

DT Journal

LA English

OS CASREACT 134:71818

RE.CNT 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN

TI Selective determination of pyridoxine in the presence of hydrosoluble vitamins using a continuous-flow solid phase sensing device with UV detection

AB A very simple, inexpensive and highly selective flow injection UV spectrophotometric method for the determination of vitamin B6 is presented. The native absorbance of the analyte is continuously monitored at 290 nm when it is transiently retained on Sephadex SP C-25 cation exchanger gel beads placed in the detection area of a flow cell. The preconcn. on the active solid phase provides by itself a high increase in sensitivity compared with the same procedure carried out without a solid support. The anal. response is linear in the concentration ranges 1-10 and 2-20 μg ml-1 using 600 and 1250 μl of sample, resp. The R.S.D. (%) are 0.65 (600 μl) and 0.84 (1250 μl) and the detection limits 0.08 and 0.02 μg ml-1, resp. The procedure was successfully applied to the determination of vitamin B6 in pharmaceuticals containing (among other active principles) hydrosol. vitamins in much higher concns. than that tolerated by the method if performed in aqueous solution Nevertheless they were tolerated using the proposed sensor due to the selective retention of the analyte.

AN 2000:504232 HCAPLUS <<LOGINID::20090217>>

DN 133:286565

TI Selective determination of pyridoxine in the presence of hydrosoluble vitamins using a continuous-flow solid phase sensing device with UV detection
AU Ayora Canada, M. J.; Pascual Reguera, M. I.; Molina Diaz, A.
CS Paraje Las Lagunillas, Faculty of Experimental Sciences, Department of Physical and Analytical Chemistry, University of Jaen, Jaen, E-23071, Spain
SO International Journal of Pharmaceutics (2000), 202(1-2), 113-120 CODEN: IJPHDE; ISSN: 0378-5173
PB Elsevier Science B.V.
DT Journal
LA English
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
TI A simple solid phase spectrofluorimetric method combined with flow analysis for the rapid determination of salicylamide and salicylic acid in pharmaceutical samples
AB A new, sensitive and very simple spectrofluorimetric biparameter sensor is described for the determination of salicylamide and/or salicylic acid in pharmaceutical prepns. The method integrates the transitory retention and fluorescence detection of both compds. on Sephadex QAE A-25 resin packed into a conventional flow-through cell. A monochannel manifold with two alternative carriers is used. At pH 2.0 (first carrier) salicylic acid is selectively retained on the solid support and after developing the anal. signal it is desorbed. At pH 11.0 (second carrier) both salicylic acid and salicylamide are simultaneously and transitorily retained on the solid, the anal. signal now corresponding to both analytes. The monochromators were tuned at 260 (excitation) and 415 (emission) nm, resp. The calibration graph for salicylamide is linear over the range 0.01 to 0.32 μg mL-1 and for salicylic acid from 0.04 to 1.0 μg mL-1 in the presence of each other. The relative standard deviation and the sampling frequency for the determination of salicylamide (0.20 μg mL-1) and salicylic acid (0.50 μg mL-1) were 1.1% and 35 h-1, and 0.9% and 45 h-1, resp. Good results on application to individual determination or mixture resolution in pharmaceutical samples testify to the usefulness of the proposed sensor.
AN 2000:5895 HCAPLUS <<LOGINID::20090217>>
DN 132:171226
TI A simple solid phase spectrofluorimetric method combined with flow analysis for the rapid determination of salicylamide and salicylic acid in pharmaceutical samples
AU Ruiz Medina, A.; Fernandez de Cordova, M. L.; Molina Diaz, A.
CS Paraje Las Lagunillas, Faculty of Experimental Sciences, Department of Physical and Analytical Chemistry, University of Jaen, Jaen, E-23071, Spain
SO Fresenius' Journal of Analytical Chemistry (1999), 365(7), 619-624 CODEN: FJACES; ISSN: 0937-0633
PB Springer-Verlag
DT Journal
LA English
RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
TI A flow-through solid phase UV spectrophotometric biparameter sensor for the sequential determination of ascorbic acid and paracetamol
AB For the first time, a continuous flow system with solid phase UV spectrophotometric detection (an optosensor) is described for the

sequential determination of two analytes based on the alternate use of two carrier/self-eluting agents. The selective and sequential sorption of both on an active solid support (an anion exchanger gel placed in the detection zone into an appropriate quartz flow cell) is performed and their resp. UV intrinsic absorbances monitored. Each carrier itself elutes the resp. analyte from the solid support, so regenerating the sensing zone. Ascorbic acid and paracetamol in concns. ranging from 0.3 to 20 μg ml-1 and from 0.4 to 25 μg ml-1, resp., could be determined with this UV flow-through optosensor using sodium acetate/acetic acid (pH 5.6) and 0.05 M NaCl (pH 12.5), resp. as carrier/self-eluting solns. and Sephadex QAE A-25 anion exchanger gel as solid phase placed in the inner of an 1 mm optical path length quartz flow cell. The RSDs % (n = 10) were lower than 1.3 (for ascorbic acid) and than 1.5 (for paracetamol). Detection limits (criterion 3σ) as low as 0.02 μg ml-1 were achieved in both cases. Application to the anal. of pharmaceutical samples (in addition to synthetic ones) testifies the utility of this sequential sensor, which tolerates amts. of the species usually accompanying the analytes much higher than those ones found in these samples.

AN 1999:753992 HCAPLUS <<LOGINID::20090217>>
DN 132:171216
TI A flow-through solid phase UV spectrophotometric biparameter sensor for the sequential determination of ascorbic acid and paracetamol
AU Ruiz-Medina, A.; Fernandez-de Cordova, M. L.; Ayora-Canada, M. J.; Pascual-Reguera, M. I.; Molina-Diaz, A.
CS Faculty of Experimental Sciences, Department of Physical and Analytical Chemistry, University of Jaen, Jaen, 23071, Spain
SO Analytica Chimica Acta (2000), 404(1), 131-139
CODEN: ACACAM; ISSN: 0003-2670
PB Elsevier Science B.V.
DT Journal
LA English
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT